

**TEMPERATURE MEASURING DEVICE AND
SYSTEM AND METHOD INCORPORATING
THE SAME**

ABSTRACT

[0036] A system having a heat source, a component coupled to the heat source, and at least one thermistor coupled to the component and adapted to monitor temperature of the component, wherein the thermistor has a core-shell microstructure having a shell disposed about a core, the core comprising Cr_2O_3 and the shell comprising a rare earth element compound.